SUPPLEMENTARY DATA

FIG. S1. Annual increase of the diameter at breast height (DBH) of the monitored firs (A), together with the DBH distribution of all the stems of the studied stand (B). The ticks on the vertical axis in (B) represent the DBH of each tree, and the dashed line represents the median value.

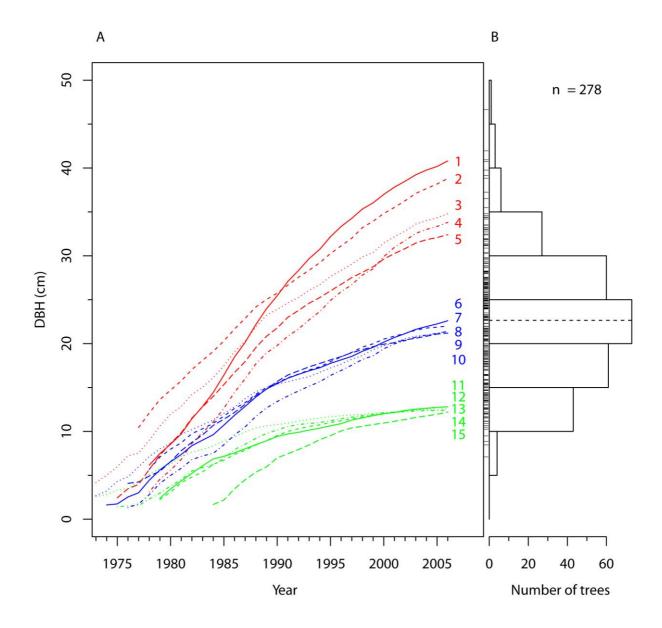


FIG. S2. Total number of xylem cells produced during the 2006 growing season, displayed individually for the 15 monitored trees. Points represent raw data (mean of three radial files) while lines represent the fitted Gompertz functions (see Table S1, below, for the values of the parameters and the goodness-of-fit of the curves).

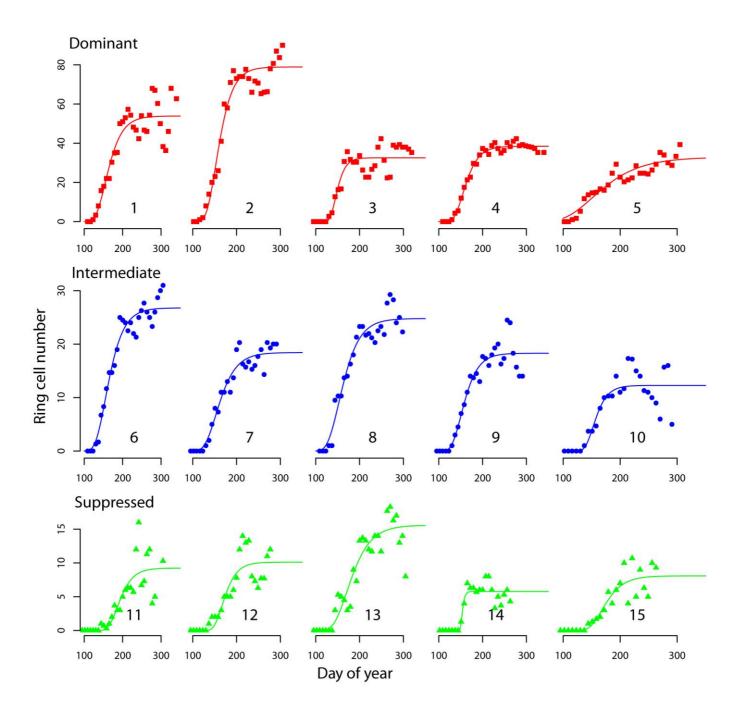


TABLE. S1. Parameters of the Gompertz functions (A, β, κ) fitted for each tree, together with the corresponding modelling efficiency (r^2) .

Social status	Tree	A	β	$\kappa \times 10^2$	r^2
~	1100	71	ρ	W // 10	,
Dominant	1	53.9	6.31	4.08	0.87
	2	78.9	7.22	4.72	0.93
	3	32.6	11.59	8.00	0.87
	4	38.5	7.86	5.08	0.99
	5	33.0	3.19	2.11	0.90
Intermediate	6	26.8	5.95	3.83	0.96
	7	18.4	5.98	3.91	0.95
	8	24.8	5.88	3.85	0.95
	9	18.3	7.07	4.68	0.91
	10	12.3	10.94	7.18	0.78
Suppressed	11	9.2	8.05	4.34	0.73
	12	10.1	8.97	5.37	0.82
	13	15.6	5.69	3.33	0.86
	14	5.8	42.16	27.60	0.87
	15	8.1	7.99	4.77	0.83